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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/065,613	CHEN, YUNG-LUNG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lawrence B. Williams	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 26 June 2006.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The instant application discloses a frequency shift key decoding apparatus, having a frequency divider, a signal frequency splitter, and a demodulator. A search of prior art records has failed to disclose a signal frequency splitter comprising:

“(n-1) first “n second mixers coupled to the first mixers and the frequency synthesizer to mix frequencies of the radio frequency signal and the local carrier signals to obtain n intermediate-frequency frequency-mixed signals, and n filters coupled to the second mixers to filter the n intermediate-frequency frequency-mixed signals  $F_{m1}$  to  $F_{mn}$  to obtain n intermediate-frequency signals” along with the remaining limitations as disclosed in claim 1.

“a plurality of second mixers, coupled to the first mixer to mix the frequency of the radio frequency signal with the frequencies of the first and the second local carrier signals to obtain a first and a second intermediate-frequency frequency-mixed frequency, respectively, and a plurality of filters coupled to the second mixers to filter the first and second intermediate-frequency frequency signals to obtain the first and second intermediate-frequency signals” along with the remaining limitations as disclosed in claim 3.

Nor does the prior art teach a frequency shift key decoding apparatus, comprising: “a frequency divider, to divide a frequency of a system frequency signal  $F_s$  into a plurality of differential frequency signals  $F_{d2}$  to  $F_{dn}$ ; a signal frequency splitter coupled to the frequency divider to generate n local carrier signals  $F_{b1}$  to  $F_{bn}$  according to the system frequency signal  $F_s$  and the differential frequency signals  $F_{d2}$  to  $F_{dn}$ , the signal frequency splitter receiving a radio frequency signal and mixing the radio frequency signal with the n local carrier signals  $F_{b1}$ , to  $F_{bn}$

Art Unit: 2611

into mixed signals and further filtering the mixed signals to obtain  $n$  intermediate frequency signals; and a demodulator, coupled to the signal frequency splitter to decode the  $n$  intermediate-frequency signals to obtain  $n$  data; wherein  $n$  is a positive integer equal to or larger than 2" as disclosed in claim 5.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **DRAWINGS**

2. The drawings were received on 26 June 2006. These drawings are accepted by the examiner.

### **CONCLUSION**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw  
August 12, 2006

  
EMMANUEL BAYARD  
PRIMARY EXAMINER